

REMARKS

Entry of the amendments to the specification, claims and abstract before examination of the application is respectfully requested. These claims patentably define over the art of record.

If there are any questions regarding this Preliminary Amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 095309.57217US).

Respectfully submitted,



Gary R. Edwards
Registration No. 31,824

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
GRE:kms

2691899v1

ABSTRACT OF THE DISCLOSURE

A hardtop ~~eabriolet~~ convertible vehicle has a front roof part (3, 3', 3''), a central roof part (4, 4', 4'') and a rear roof part that includes (5, 5', 5'') which has C-pillars (7, 7', 7'') and a rear window (8, 8', 8''). The roof parts (3, 3', 3'', 4, 4', 4'', 5, 5', 5'') are connected to one another in an articulated manner and are movable between a closed roof position and an open roof position by means of a displacing device. In the open roof position, the [[The]] roof parts (3, 3', 3'', 4, 4', 4'', 5, 5', 5'') are located in a trunk [[(9)]] of the ~~eabriolet~~ (1) ~~in the open roof position, vehicle,~~ with the rear roof part (5, 5', 5'') and the central roof part (4, 4', 4'') coming to lie lying one above the other. The rear window (8, 8', 8'') of the rear roof part (5, 5', 5'') is mounted in an articulated manner in relation to the C-pillars (7, 7', 7'') of the rear roof part (5, 5', 5'') such that it is pivoted in relation to the C-pillars (7, 7', 7'') during the movement of the roof parts (3, 3', 3'', 4, 4', 4'', 5, 5', 5'') between the closed roof position and the open roof position and ~~comes to lie~~ assumes a position with its curvature in the same direction as the central roof part (4, 4', 4''). In the open roof position, the front roof part (3, 3', 3'') ~~comes to lie~~ lies outside the rear roof part (5, 5', 5'') and the central roof part (4, 4', 4'') either along a backrest [[(10)]] or along a motor vehicle tank [[(12)]].

IAP20 Rec'd PCT/PTO 30 DEC 2005

Attorney Docket No. 095309.57217US
Marked Up Substitute SpecificationHARDTOP CABRIOLET CONVERTIBLE VEHICLEBACKGROUND AND SUMMARY OF THE INVENTION

[0001] This application claims the priority of German patent document 103 29 439.2, filed July 1, 2003 (PCT International Application No. PCT/EP2004/006951, filed June 26, 2004), the disclosure of which is expressly incorporated by reference herein.

[0002] The present invention relates to a hardtop cabriolet convertible vehicle, according to the type defined in more detail in the precharacterizing clause of claim 1.

[0003] A cabriolet convertible of the generic type with a hardtop which has three roof parts, is known, disclosed for example, from in German patent document DE 101 33 957 A1. In this case, In the open roof (top down) position, the front roof part is stowed put away, in the open roof position, in the trunk of the vehicle, between the central and the rear roof parts. The, the front roof part being is raised over the central roof part by means of a corresponding lever arrangement during the putting away a stowing movement.

[0004] German patent document DE 199 62 070 A1 also shows discloses a similar prior art arrangement, in which the front roof part is likewise raised over the central roof part. However, in the put-away stowed state, the front roof part comes to lie right lies at the top.

[0005] German patent document DE 196 42 153 A1, on the other hand, describes a motor vehicle with a retractable roof which likewise also has three roof parts. In this case, the front roof part is folded in an articulated manner and is put away stowed in the trunk between the central roof part and the rear roof part. A similar folding-in of the front roof part is also described in German patent document DE 93 07 481 U1, but with the front roof part coming to lie right at the bottom.

[0006] German patent document DE 197 51 660 C1 discloses a device for putting away stowing the roof construction of a hardtop vehicle, [[in]] which includes a front roof part and a rear roof part ~~are provided~~. The rear roof part has a rear window which that is pivoted relative to the rear roof part by means of a lever and a joint during the putting away stowing movement of the two roof parts and is put away stowed in an opposed direction to [[said]] the rear roof part. Rotation of the rear window in such a manner is also known from German patent document DE 198 07 490 C1. However, in [[this]] the latter case, the rear window is merely rotated through an angle of approx. 15° and is therefore put away stowed essentially in the same direction as the rear roof part.

[0007] Finally, German patent document DE 101 16 709 A1 also discloses the movement of a rear window in relation to the rear roof part. However, in this case the rear roof part has an additional roof segment which likewise has to be pivoted, so that a very complicated construction and a correspondingly complicated putting away stowing movement arise are required.

[0008] In ~~the case of~~ all of the described roof systems with three roof parts, there is the fundamental problem that, in the open (top down) roof position, in which all of the roof parts are located in the trunk, ~~considerable restrictions with regard to the volume of space available in the trunk have to be accepted is substantially restricted.~~

[0009] It is therefore [[the]] an object of the present invention to provide a ~~eabriolet convertible vehicle~~ with a hardtop with at least three roof parts, in which the hardtop requires as little space as possible when ~~put away stowed~~ in the trunk.

[0010] According to the invention, this object is achieved by the features mentioned in claim 1. This and other objects and advantages are achieved by the convertible top configuration according to the invention, in which By means of the articulated mounting of the rear window is articulated in relation to the C-pillars. The resultant and the resultantly caused pivoting of the same, as a result of which causes the rear window to assume a position in which it lies comes to lie with its curvature in the same direction as that of the central roof part, achieving a considerable saving amount of space is saved in the region between the C-pillars of the rear roof part. Thus, thus also providing very much substantially more space is available for luggage when the roof is in the open [[roof]] (top down) position.

[0011] The volume of [[the]] available trunk space in the open roof position is furthermore further increased by the fact that the front roof part comes to lie is stowed in a very space-saving efficient manner, either along a backrest or along

a motor vehicle tank, rather than being in an arrangement together with the rear and the central roof parts one above another. The result is therefore a eabriolet convertible which provides its passengers with sufficient luggage space, even in the open state of the roof.

[0012] A particular advantage of the invention can be seen in its comparatively simple construction with a correspondingly uncomplicated configuration of the components.

[0013] Other objects, advantages and novel features of the present invention will become apparent from the following detailed description of the invention when considered in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Advantageous refinements and developments of the invention emerge from the subclaims and from the exemplary embodiments illustrated in principle below with reference to the drawing, in which:

[0014] fig. 1 Figure 1 shows a first embodiment of the hardtop eabriolet convertible according to the invention; and

[0015] fig. 2 Figure 2 shows a second embodiment of the hardtop eabriolet convertible according to the invention.

DETAILED DESCRIPTION OF THE INVENTION

[0016] Fig. 1 shows a eabriolet convertible 1 with a hardtop 2 which has three roof parts, namely including a front roof part 3, a central roof part 4 and a rear

roof part 5. In this case, the rear roof part 5 comprises a rear window 6 and two C-pillars 7 of which just one can be seen in the side view according to fig. 1 of Fig. 1.

[0017] The hardtop 2 is illustrated in two positions in [[fig.]] Fig. 1, namely in a closed roof position, in which the hardtop 2 and the roof parts 3, 4 and 5 extend from a windshield 8 to a trunk 9 which has a trunk lid 9a. The second position is assumed when formed if the roof parts 3', 4' and 5', which are referred to here by a', (designated by a "prime" mark) are located in the trunk 9, and therefore an in the open roof (top down) position is produced.

[0018] The roof parts 3, 4 and 5 are connected to one another in an articulated manner, and thus [[The]] movement of the hardtop 2 between the closed roof position and the open roof position takes place is performed by means of a displacing device which is not illustrated but is known per se, the roof parts 3, 4 and 5 being connected to one another in an articulated manner. In the open roof position, the rear roof part 5' and the central roof part 4' come to lie one above the other, with the rear roof part 5' being arranged below the central roof part 4' in the present case.

[0019] The rear window 6 is mounted in an articulated manner in relation to the C-pillars, such that it is pivoted in relation to the C-pillars 7 during [[the]] movement of the roof parts 3, 4 and 5 and, as indicated by the position of the rear window 6', comes to lie with its curvature in the same direction as the central roof part 4'. As a result, only the C-pillars 7' of the rear roof part 5' are located in a lower position. However, due but owing to the position of the C-pillars 7' on

the two sides of the trunk 9, only a very small amount of space is taken up within the trunk 9 as a result.

[0020] In order to be able to load as much luggage as possible into the trunk 9, in the case of the embodiment according to [[fig.]] Fig. 1, the front roof part 3' comes to lie moves to a position along a backrest 10 of a rear seat bench 11 of the convertible 1, outside the arrangement of the rear roof part 5' with the central roof part 4' along a backrest 10 of a rear seat bench 11 of the cabriolet 1. The front roof part 3' is therefore located between the backrest 10 and a motor vehicle tank 12. Of course, the motor vehicle tank 12 may also be located at a different point within the cabriolet convertible 1.

[0021] The embodiment of the hardtop 2 according to [[fig.]] Fig. 2 is [[very]] similar to that according to fig. of Fig. 1, with the open roof position being indicated by ["]] a double prime mark Thus, the rear roof part 5", the central roof part 4", [[and]] the rear window 6" and the C-pillars 7" are located in the same position as in the case of [[fig.]] Fig. 1. By contrast, the The front roof part 3" again comes to lie assumes a position outside the arrangement of the rear roof part 5" with the central roof part 4", but in this embodiment it lies along the motor vehicle tank 12 and behind the same in the direction of travel. In this case, the The shape of the motor vehicle tank 12 can be matched to the shape of the front roof part 3 in order to achieve a volume of the motor vehicle tank 12 which is as large as possible.

[0022] The displacing device apparatus can have a plurality of rotary drives which are arranged in each case on the articulated connections between the roof

parts 3, 4 and 5. This assists the exact ~~putting away~~ stowing of the front roof part 3 into the intermediate space between the backrest 10 and the motor vehicle tank 12 in the case of [[fig.]] Fig. 1 or along the motor vehicle tank 12 in the case of [[fig.]] Fig. 2.

[0023] As an alternative, ~~it is also possible for the displacing device to apparatus can~~ have a driving device, such as, for example, an electric motor or a plurality of hydraulic cylinders, ~~and for with~~ the roof parts 3, 4 and 5 to be connected to one another via respective lever arrangements (not illustrated).

[0024] The two embodiments according to ~~fig. 1 and fig. 2~~ Figures 1 and 2 illustrate different ~~eabriolets~~ vehicles 1. That is, [[. and,]] for reasons of saving space, it is not ~~envisaged allowing anticipated to allow~~ the driver of the ~~eabriolet convertible~~ 1 to select whether he would like to ~~put away~~ stow the front roof part 3 along the backrest 10 or along the motor vehicle tank 12 when opening the hardtop 2.

[0025] The foregoing disclosure has been set forth merely to illustrate the invention and is not intended to be limiting. Since modifications of the disclosed embodiments incorporating the spirit and substance of the invention may occur to persons skilled in the art, the invention should be construed to include everything within the scope of the appended claims and equivalents thereof.